

REMARKS

Terminal Disclaimer

A terminal disclaimer was submitted September 18, 2002 (A copy of the filed disclaimer is enclosed). If the Office has not received the previously filed terminal disclaimer, the applicant would appreciate a telephonic notification so that a substitute terminal disclaimer can be promptly filed.

35 USC § 112

Claim 6 was previously rejected under 35 USC § 112 as being indefinite. Specifically, the Examiner noted that the term "SP1" broadly encompasses any molecule under the grouping of SP1 molecules (or genus of all SP1 molecules), and that a person of ordinary skill in the art would therefore lack requisite guidance. The applicant disagrees.

The term SP1 molecule is well understood and delineated to a person of ordinary skill in the art. For example, Cook et al. (in a review article published before the filing date of the present application) clearly define the SP1 molecule using various approaches as a set of specific transcription factors. In fact Cook prefaces his review by stating "...The goal of this article is to use available database information and recent experimental evidence to describe the current repertoire of Sp1-like zinc finger transcription factors in mammalian cells..." (Ann. N. Y. Acad. Sci. 1999 Jun 30;880: 94-102). In fact, even the Examiner implicitly acknowledges the presence of metes and bounds for the term the term "SP1" by referring to these molecules as "genus of all SP1 molecules".

With respect to **claims 17, and 19-25**, the Examiner stated that the claims fail to provide reasonable enablement. The applicant disagrees, especially in view of the amendments made herein.

Amended claim 17 (and claims 19-25 by virtue of their dependence on amended claim 17) recites a "method of medicating a cell". The specification expressly provides guidance to a person of ordinary skill in the art on how to administer the aptamers according to the inventive subject matter (see *e.g.*, pages 9-10). Viewed from another perspective, what is not claimed is a

method of treatment of a specific disease, but a method of medicating a cell by administration of contemplated compound(s), which is clearly enabled *in vitro* as well as *in vivo*.

35 USC § 102

Claims 1-3, 7, 9, and 10 were previously rejected under 35 USC § 102(b) as being anticipated by Patel et al. (J. Mol. Biol. (1997) 272, 645-664), and **Claims 1-6, 8, and 10** were further rejected under 35 USC § 102(b) as being anticipated by Sharma et al. (Anticancer Res. (1996) 16, 61-70). More specifically, the Examiner points out that when the term "about 12 to 22 nucleotides" is taken in its broadest possible meaning, the claims would be anticipated by Patel and Sharma or Smith.

The applicant disagrees, nevertheless has amended claim 1 to remove the term "about". Thus, the amended claims expressly require that the aptamers have a distinct and clearly defined length, which is neither taught by Patel, Sharma or Smith.

Allowable Subject Matter

The applicant acknowledges the Examiner's statement of allowability of claims 12, 14, and 15.

ATTACHED MARKED-UP VERSION OF CHANGES

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE".

REQUEST FOR ALLOWANCE

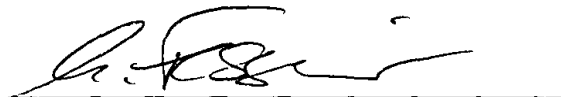
Claims 1-4, 6-17, and 19-25 are pending in this application. The applicant requests allowance of all pending claims.

Respectfully submitted,

Rutan & Tucker, LLP

Dated: March 17, 2003

By:



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

1. (Twice Amended) An aptamer having a length of between [about] 12 and 22 nucleic acid units, inclusive, and having a sequence which includes at least two G-rich regions selected from the group consisting of GGnG, GGGG, GnGG, nGGG and GGGn, where G is guanidine and n is any nucleotide, and wherein the aptamer reduces CD28 expression in an activated human T-cell.
17. (Twice Amended) A method of [treating] medicating an immunocompetent cell, comprising administering to the cell an aptamer according to claim 1 at a concentration effective to reduce CD28 expression.